KENDMENT TRANSMITTAL LETTER **CLIENT-MATTER NO.:** 66692-043 (P-TB 5072) SERIAL NO: FILING DATE: **EXAMINER: GROUP ART UNIT: 1631** 10/040,895 CONFIRMATION NO.: 1917 December 28, 2001 S. Zhou INVENTION: METHODS FOR PREDICTING FUNCTIONAL AND STRUCTURAL PROPERTIES OF POLYPEPTIDES USING SEQUENCE MODELS

TO: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"EXPRESS MAIL" MAILING LABEL NUMBER: EV 401710872US DATE OF DEPOSIT: October 23, 2003 I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE, AND IS ADDRESSED TO COMMISSIONER FOR PATENTS, P.O. BOX 1450. ALEXANDRIA, VA 22313-1450.

Rebecca Clifford

(TYPED OR PRINTED NAME OR PERSON MAILING PAPER OR FEE)

(SIGNATURE OF PERSON MAHING PAPER OR FEE)

Transmitted herewith is a Response to the Office Action mailed September 23, 2003, in the above-identified application.

- X Small Entity status of this application has been established under 37 CFR 1.27.
- Petition for -Month Extension of Time is enclosed (in duplicate).
- Terminal Disclaimer with fee under 37 C.F.R. 1.20(d) is enclosed.
- X No additional claims fee is required.
- An additional claims fee is required and has been calculated as shown below:

CLAIMS AS AMENDED

	NUMBER		HIGHEST	NUMBER			RATE			FEE	
	AFTER AMEND-		NUMBER PREVIOUSLY		OF EXTRA CLAIMS		SMALL ENTITY	OTHER ENTITY		SMALL ENTITY	OTHER ENTITY
TOTAL	MENT	<u> </u>	PAID FOR		PRESENTED	_			<u> </u>		
TOTAL CLAIMS	32	-	32	-	0	х	\$9	\$18	=	\$0.00	\$
INDEPEN- DENT			·								
CLAIMS	3	-	3	-	0	x	\$42	\$84	=	\$0.00	\$
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM YES			-	X NO		\$140	\$280	=	\$0.00	s	
								<u> </u>			
							TOTAL ADD	DITIONAL		\$0.00	\$

- If the "HIGHEST NUMBER PREVIOUSLY PAID FOR" is less than 20, write "20" in this space.
- If the "HIGHEST NUMBER PREVIOUSLY PAID FOR" is less than 3, write "3" in this space.
- If the difference between the "NUMBER AFTER AMENDMENT" and the "HIGHEST NUMBER PREVIOUSLY PAID FOR" is less than 0, write "0" in the space.
- Please charge my Deposit Account No. 502624 the amount of \$ which covers the fee for a one-month extension of time. A duplicate copy of this sheet is enclosed.
- <u>X</u> The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment to Deposit Account No. 502624. A duplicate copy of this sheet is enclosed

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X The Commissioner is hereby authorized to charge to Deposit Account No. 502624 any fees under 37 CFR 1.17 which may be required under 37 CFR 1.136(a)(3) for an extension of time in any concurrent or future reply requiring a petition for extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Deborah L. Cadena

Registration No. 44,048

McDERMOTT, WILL & EMERY 4370 La Jolla Village Drive Suite 700 San Diego, California 92122 858-535-9001



PATENT

Client-Matter No.: 66692-043

(P-TB 5072)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	Confirmation No: 1917
Sem et al.)	Group Art Unit: 1631
Serial No.: 10/040,895)	Examiner: S. Zhou
Filed: December 28, 2001)	CERTIFICATE OF MAILING BY "EXPRESS MAIL"
For: METHODS FOR PREDICTING FUNCTIONAL AND STRUCTURAL PROPERTIES OF POLYPEPTIDES USING SEQUENCE MODELS))))	"EXPRESS MAIL" MAILING LABEL NUMBER: EV 401710872 US DATE OF DEPOSIT: October 23, 2003 I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 C.F.R. 1.10 ON THE DATE INDICATED ABOVE, AND IS ADDRESSED TO COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450. Rebecca Clifford (TYPED OR PRINTED NAME OR PERSON MAILING PAPER OR FEE)
Commissioner for Patents P.O. Box 1450		(SIGNATURE OF PERSON MAILING PAPER OR FEE)
Alexandria, VA 22313-1450		

RESPONSE TO OFFICE ACTION

Responsive to the Office Action mailed September 23, 2003, entry of the following amendments and remarks is respectfully requested.

Amendments to the specification begin on page 2 of this paper.

Remarks begin on page 3 of this paper.

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Filed: December 28, 2001

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AMENDMENTS

On page 1, please amend the first paragraph on lines 2-7 as follows:

This application claims benefit of provisional application serial no. [60/_____] 60/367,371, filed December 29, 2000, now abandoned, which was converted from U.S. Serial No. 09/753,020, filed December 29, 2000, and which is incorporated herein by reference.

On page 8, please amend the paragraph on lines 18-28 as follows:

Figure 11 shows a sequence alignment (SEQ ID NOS:1-17, respectively) made from a structural overlay of pharmacofamily 1. Amino acids shown correspond to those which are within regions that overlap in the structural overlay. All bolded letters are within 4.5 Angstroms from a ligand binding site. Underlining indicates proximity to a cofactor ligand and/or substrate ligand as follows: bold underling indicates proximity to a bound cofactor, double underling indicates proximity to a bound substrate, and dotted underling indicates proximity to both bound cofactor and bound substrate.